

dated 04-09-2003 MAJR/jes

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CLAIMS

1. Apparatus for breaking rock which includes a cartridge which forms an enclosure, a propellant inside the enclosure, and at least one element which is electrically energisable, which is made from inert material exposed to the propellant and which, when energised, initiates combustion of the propellant to release high pressure material inside the cartridge.
2. Apparatus according to claim 1 wherein the element is made from a material selected from carbon, graphite, aluminum, and nickel-chrome.
3. Apparatus according to claim 1 or 2 wherein the cartridge is made from a malleable material and includes a cylindrical side wall, a base and a domed end which opposes the base.
4. Apparatus according to any one of claims 1 to 3 which includes electrical leads which extend from terminals on an outer side of the cartridge to the element.
5. Apparatus according to claim 4 which includes a removable closure which covers the terminals.
6. Apparatus according to any one of claims 1 to 5 which includes a substrate on which the element is mounted and which is embedded in the propellant.
7. Apparatus according to claim 6 which includes a control device, for controlling operation of the element, on the substrate.

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8. Apparatus according to any one of claims 1 to 7 wherein the element is in the form of an elongate filament.